ABSTRACT

A STUDY **ON NON-INVASIVE PREDICTORS OF LARGE ESOPHAGEAL VARICES IN PATIENTS WITH CIRRHOSIS.**

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KEYWORDS:LARGE ESOPHAGEAL VARICES, NON INVASIVE PREDICTORS , CIRRHOSIS

ABSTRACT

INTRODUCTION: Identication of large-sized esophageal varices, before their first bleeding, is essential to prevent or minimize this life threatening complication of liver cirrhosis.

Current guidelines recommend using upper gastrointestinal endoscopy (UGIE) to screen all cirrhotic patients at diagnosis for identification of varices at a high risk of bleeding.In addition, surveillance endoscopies are recommended every 1-2 years for patients with small varices or every 2-3 years for patients with no varices in case of compensated cirrhosis and yearly for decompensated cirrhosis. Even though UGIE is believed to be the gold standard to diagnose esophageal varices, the use of UGIE has its own limitations.So some noninvasive means are needed for prediction of esophageal varices in order to restrict UGIE to the population with high risk of variceal bleeding. In a limited resources setting like ours,where financial constraints are a major problem,predicting the presence and grade of varices by non-invasive methods serves to help a lot in various ways.

AIMS AND OBJECTIVES:

To identify and study noninvasive investigative parameters (clinical, biochemical,radiological) that could predict the presence and grades of oesophageal varices in cirrhosis patients.

MATERIALS&METHOD: The present study was conducted on 50 patients admitted with a diagnosis of cirrhosis of liver at general medicine and medical gastroenterology wards of Government Rajaji Hospital, Madurai during the period of February 2016 to July 2016.

The study was conducted among patients from General Medicine wards of Government Rajaji Hospital, Madurai during the period of February 2016 to July 2016. The study included 50 patients with a diagnosis of cirrhosis Subjects believed to fulfill all eligibility criteria, and none of the exclusion criteria were included in the study.

METHODOLOGY: A previously designed proforma was used to collect the demographic and clinical details of the patients. All the patients underwent detailed clinical evaluation, appropriate investigations, imaging studies (ultrasound with Doppler) and upper g.i endoscopy.

History was taken on details and duration of alcoholism, jaundice, ascites, oliguria, pedal edema and gastrointestinal bleed. Presence or absence of jaundice, ascites, splenomegaly and hepatic encephalopathy was noted. Platelet count, prothrombin time and INR,liver function tests including serum bilirubin, serum transaminases, serum albumin was estimated. Modified Child-Turcotte-Pugh (CTP) class was calculated for each patient. At ultrasonogram abdomen and Doppler study of portal venous system, the portal vein and spleen diameter along with echo texture of the liver,spleen, size and direction of blood flow,ascites was noted. The portal vein diameter and platelet count / spleen diameter ratio was determined. At UGI endoscopy, the esophageal varices was graded as large (Grade III-IV) or small (Grade I-II), based on Paquet's grading system.

RESULTS: Out of 50 total patients,28 had small varices and 22 had large varices. From the present study, Child Pugh class B/C,presence of higher grades of Ascites,low platelet count,low serum albumin,high total bilirubin,elevated prothrombin time,higher portal vein diameter,higher spleen size ,lower platelet count /spleen diameter ratio emerged as significant predictors for the presence of large esophageal varices.

CONCLUSION: Child Pugh class B/C,presence of higher grades of Ascites,low platelet count,low serum albumin,high total bilirubin,elevated prothrombin time,higher portal vein diameter,higher spleen size ,lower platelet count /spleen diameter ratio emerged as significant predictors for the presence of large esophageal varices.Presence and Grade of varices was correlated with severity of liver diseases as,in large varices group, 13.6% were in CTP-A, 31.8% were in CTP-B , 54.5% were in CTP-C class.

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